DEPARTMENT OF THE NAVY



PROGRAM EXECUTIVE OFFICER, COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS AND INTELLIGENCE AND SPACE 4301 PACIFIC HIGHWAY SAN DIEGO, CA 92110-3127

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Ser PEO C4I/002

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From: Program Executive Officer, Command, Control,

Communications, Computers and Intelligence and Space

Subj: NET-CENTRIC ENTERPRISE SOLUTIONS FOR INTEROPERABILITY (NESI) GUIDANCE

Ref: (a) Net-Centric Enterprise Solutions for Interoperability (NESI) Document Set, v1.1, of 3 Jun 05

- (b) PEO C4I and Space Acquisition Program Structure Guide
- (c) Joint Letter PEO IWS 5000 Ser PEO IWS/314 of 1 Nov 04 and PEO C4I and Space 5000 Ser PEO C4I/432 of 1 Oct 04
- (d) PEO C4I and Space ltr 5000 Ser PEO C4I/274 of 14 Jun 04, Subj: Software Maintenance Policy
- (e) CNO N6/N7 ltr 3170 Ser N6N7/5U916222 of 27 May 05, Subj: FORCEnet Requirement/Capabilities and Compliance Policy
- (f) FORCEnet Technical Reference Guide for Program Managers

Encl:

- (1) PEO C4I and Space FORCEnet Category Listing
- (2) NESI Technical Guidance Compliance Checklist
- (3) NESI Acquisition Guidance Compliance Checklist
- (4) Program NESI Compliance Briefing Template
- 1. <u>Purpose</u>. This memorandum serves to promulgate and mandate reference (a), which presents technical and acquisition implementation guidance for building information systems conforming to the Net-Centric Warfare (NCW) environment.
- 2. <u>Background</u>. NESI is a collaborative effort between the Navy's PEO C4I and Space and the Air Force's Electronic Systems Center (ESC) to increase integration and interoperability of C4I systems across the DoD. This guidance is consistent with and incorporates the concepts of FORCEnet and Open Architecture (OA) and facilitates alignment with the ASD (NII) Net-Centric Checklist. NESI supplements reference (b), which can be found at http://enterprise.spawar.navy.mil/apsg, by providing detail on how to implement net-centric and open architecture principles within DoD acquisition. In reference (c), NESI is called out as the Navy C4I domain's technology standards and design guidance to support OA-based systems. In addition, programs are required

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per reference (d) to consider NESI's net-centric migration guidance when making decisions on software maintenance actions.

The NESI guidance supersedes PEO C4I and Space's Reusable Application Integration and Development Standards (RAPIDS) and ESC's Command and Control Enterprise Reference Architecture (C2ERA). In addition, future iterations of this guidance will include Army participation as well as other agencies and organizations such as DISA.

- a. Reference (a) consists of a total of six parts as follows:
 - (1) Part 1 Overview
 - (2) Part 2 ASD (NII) Net-Centric Checklist Implementation Guidance
 - (3) Part 3 Net-Centric Migration Guidance (for legacy applications)
 - (4) Part 4 Node Design Guidance
 - (5) Part 5 Developer's Guidance (for legacy and newstart programs/applications/systems)
 - (6) Part 6 Acquisition Guidance
- b. The documents may be obtained from the NESI public website: http://nesipublic.spawar.navy.mil/.
- 3. Procedures. Per references (e) and (f), NESI is one of the System/Technical criteria for FORCEnet compliance. All programs designated as FORCEnet Category 3 (Refresh) or 4 (New Start) (see enclosure (1)), engaging in future development, migration or significant software maintenance efforts shall adhere to the NESI development standards and ensure the appropriate components are included in system development contracts and program documentation. To assist program managers with implementing NESI, consolidated guidance checklists for both technical and acquisition aspects are included in enclosures (2) and (3).
- a. Future program reviews, design reviews, or milestone decisions with PEO C4I and Space shall include NESI status and considerations within the briefing materials. The initial template is included as enclosure (4). Future updates to this

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template will be available on the PEO C4I Acquisition Management Office (AMO) website: https://c4isr.spawar.navy.mil/aso.

- b. In order to achieve NESI's goals, which are based on a shared service and re-usable components, program offices shall ensure that government rights and contractor intellectual property rights are carefully defined as part of their contracting strategies, requests for proposals and related documentation. It is the desire and intent of PEO C4I and Space to obtain unlimited or government purpose rights for all software developed as part of its programs. More detail can be found in Part 6 of reference (a).
- c. Programs shall begin utilizing the NESI collaborative development tool to facilitate sharing of software source code, services, and data exchange between internal and external DoD programs. This repository shall include appropriate developmental artifacts (i.e., source code, executables, and technical documentation) from both industry-developed products as well as software developed by government labs and systems centers. This tool is not meant to replace current software development tools or processes, but rather to act as a higher-level collaboration site for programs to increase software reuse and commonality across PEO C4I and Space. The tool is located at https://nesi.spawar.navy.mil.

4. Inquiries on this subject should be directed to Mr. Chris Miller at (858) 537-0613, chris.miller@navy.mil, or Mr. Greg Settelmayer at (619) 553-3384, gregary.settelmayer@navy.mil.

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